

AMENDMENTS TO AND LISTING OF CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended) In a bi-directional communication system performing a sequence of operations including groups of one or more individual operations having an associated status indication, a method for capturing indication of system status, comprising the steps of:

generating ordered status indications reflecting the status of completion of sequentially performed groups of operations wherein individual status indications are associated with corresponding groups of operations;

capturing said generated status indications;

retaining said captured status indications following initiation of repetition of said groups of operations; and

providing said retained captured status indications as identification of an attained operational status of said system for system operation diagnosis, ~~diagnosis~~.

wherein said groups of operations include at least two different operations from operations including (a) tuning, (b) ranging, (c) configuring, and (d) registering.

2. (Original) A method according to claim 1, wherein  
said bi-directional communication system is a cable modem,  
said generating step generates hierarchically ordered status indications, and  
said sequentially performed groups of operations comprise at least one of (a) an initialization procedure of said cable modem system, (b) a fault diagnosis procedure of said cable modem system and (c) an abnormal condition monitoring procedure of said cable modem system.

3. (Cancelled)

4. (Original) A method according to claim 1, wherein

said status indications identify the status of groups of operations being performed prior to interruption by a condition including at least one of (a) a fault condition, (b) an abnormal operation condition and (c) a commanded interruption condition.

5. (Original) A method according to claim 1, wherein  
said captured status indications identify the highest operational state reached in initialization of said system prior to an interruption and are provided in response to a User command.

6. (Original) A method according to claim 1, wherein  
said User command comprises selection of a power switch setting.

7. (Original) A method according to claim 1, wherein  
said capturing status indications are usable in combination for fault finding and problem diagnosis by a technician.

8. (Original) A method according to claim 1, wherein  
said providing step comprises at least one of (a) displaying said retained captured status indications to a User of said system, and (b) maintaining said retained captured status indications in memory accessible by a User of said system.

9. (Original) A method according to claim 8, wherein  
said providing step comprises retaining said captured status indications during re-cycling of said sequentially performed groups of operations.

10. (Original) A method according to claim 1, wherein  
said providing step comprises displaying said retained captured status indications as hierarchically ordered visual indicators comprising at least one of (a) LED's, (b) a visible progressive illuminated bar indicator, (c) non-LED illuminations and (d) audible indications.

11. (Original) A method according to claim 1, wherein  
said providing step comprises maintaining said retained captured status indications in a removable storage medium to be available during re-cycling of said sequentially performed groups of operations.

12. (Original) A method according to claim 1, wherein  
said providing step comprises providing via remote access communication said retained captured status indications as hierarchically ordered fields of data indicators.

13. (Currently Amended) In a modem system performing an initialization procedure comprising a sequence of operations including groups of one or more individual operations having an associated status indication, a method for capturing indication of system status, comprising the steps of:

generating hierarchically ordered status indications reflecting the status if completion of sequentially performed groups of operations wherein individual status indications are associated with corresponding groups of operations and identify the status of groups of operations being performed prior to interruption by a condition including at least one of (a) a fault condition, (b) an abnormal operation condition and (c) a commanded interruption condition;

capturing said generated status indications;

retaining said captured status indications following initiation of repetition of said groups of operations; and

providing said retained captured status indications as identification of an attained operational status of said system for system operation ~~diagnosis, diagnosis.~~

wherein said groups of operations include at least two different operations from operations including (a) tuning, (b) ranging, (c) configuring, and (d) registering.

14. (Previously Presented) A method according to claim 13, wherein  
said sequentially performed groups of operations comprise at least one of (a) an initialization procedure of said modem system, (b) a fault diagnosis procedure of said modem system and (c) an abnormal condition monitoring procedure of said modem system.

15. (Original) A method according to claim 13, wherein  
said captured status indications identify the highest operational state reached  
in initialization of said system.

16. (Original) A method according to claim 13, wherein  
said captured status indications are useable in combination for fault finding  
and problem diagnosis by a technician.

17. (Cancelled)

18. (Original) A method according to claim 13, wherein  
said captured status indications identify the highest operational state reached  
in initialization of said system prior to an interruption and are provided in response to a User  
command.

19. (Original) In a modem system performing an initialization procedure  
comprising a sequence of operations including groups of one or more individual operations  
having an associated status indication, a method for capturing indication of system status,  
comprising the steps of:

generating hierarchically ordered status indications reflecting the status of  
completion of sequentially performed groups of operations partitioned into a hierarchical  
sequence of operational levels with individual levels including one or more of (a) tuning, (b)  
ranging (c) configuring and (d) registering operations and having a corresponding status  
indication;

capturing said generated status indications;

retaining said captured status indications following initiation of repetition of  
said groups of operations; and

providing said retained captured status indications as identification of an  
attained operational status of said system for system operation diagnosis.

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20. (Previously Presented) A method according to claim 19, wherein said sequentially performed groups of operations comprise at least one of (a) an initialization procedure of said modem system, (b) a fault diagnosis procedure of said modem system and (c) an abnormal condition monitoring procedure of said modem system.

21. (Original) A method according to claim 19, wherein said captured status indications identify the highest operational state reached in initialization of said system.